IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

		Attorney Docket No.: **BUR920040017US1**
In re Application of:	§	
	§	Confirmation No.: **3807**
BUETI ET AL.	§	
	§	Examiner: **LAM, K.**
Serial No.: **10/709,808**	§	
	§	Art Unit: **2611**
Filed: **28 MAY 2004**	§	
	§	
For: **METHOD AND APPARATUS FOR DYNAMICALLY MANAGING POWER CONSUMPTIONS OF SENDING AND RECEIVING DRIVERS**	§	

APPEAL BRIEF

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The present Brief is submitted in support of the Appeal in the above-identified application.

Please charge IBM Corporation Deposit Account **09-0456** in the amount of $500.00 for the submission of the present Brief. No additional fee or extension of time is believed to be required; however, in the event an additional fee or extension of time is required, please charge that fee to the IBM Corporation Deposit Account **09-0456**.

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REAL PARTY IN INTEREST

The present application is assigned to International Business Machines Corporation, the real party of interest.

RELATED APPEALS AND INTERFERENCES

No related appeal is presently pending.

STATUS OF THE CLAIMS

Claims 1-20, which were finally rejected by the Examiner as noted in the Final Office Action dated July 17, 2007 and in the Advisory Action dated August 22, 2007, are being appealed.

STATUS OF AMENDMENTS

An Amendment was submitted on August 13, 2007 in reply to the Final Office Action dated July 17, 2007.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The claimed invention is related to a method for managing power consumptions of a sending driver and a receiving driver. After receiving data from a sender, the sending driver sends the data to the receiving driver via a transmission line. According to Claim 1 (and similarly Claim 11), a sensor is coupled to the sender and the sending driver (page 5, line 28; sensor **26** of Figure **2**). The sensor adjusts the supply voltage level to the sending driver according to the amount of data that needed to be sent by the sender (page 5, line 28 - page 6, line 19; data level detector **31** within sensor **26** of Figure **3**). The sending driver subsequently transmits the data on the transmission line to the receiving driver according to the adjusted supply voltage level (page 7, lines 5-7; sending driver **23** and transmission line **25** of Figure **3**).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Examiner's rejections of Claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by *McClennon et al.* (US 6,721,355).

ARGUMENT

The Examiner's rejections of Claims 1-20 were not well-founded and should be reversed.

I. *McClennon* does not teach or suggest the claimed adjusting a supply voltage level

Claim 1 (and similarly Claim 11) recites a step of "adjusting a supply voltage level by said sensor to said sending driver" in response to an amount of data that needed to be sent by said sender, and a step of "transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted supply voltage level."

On pages 3-4 of the Final Office Action, the Examiner asserts that the claimed adjusting step can be performed by *McClennon*'s data traffic predictor **120** shown in Figure **3**. The operations of data traffic predictor **120** are listed in Figure **7** (col. 10, line 25).

According to *McClennon*, if no incoming data is detected, power mode controller **126** signals modem **20** to enter a quiescent mode (col. 10, lines 31-33). However, if incoming data is detected, power mode controller **126** signals modem **20** to enter a full on mode when the amount of previously received incoming data is greater than a predetermined threshold value (col. 10, lines 34-40). If the amount of previously received incoming data is less than the predetermined threshold value, then periodicity detector **124** determines if the incoming data is periodic. If the incoming data is not periodic, power mode controller **126** signals modem **20** to enter the full on mode (col. 10, line 40-45); but if the incoming data is periodic, power mode controller **126** signals modem **20** to enter the quiescent mode (col. 10, line 45-50).

Thus, *McClennon* teaches that modem **20** can enter one of the following two modes: full on mode and quiescent mode. However, *McClennon* does not teach or suggest the claimed step of "adjusting a supply voltage level by said sensor to said sending driver," as claimed. Since

McClennon does not teach or suggest the claimed step of "adjusting a supply voltage level," *McClennon* cannot teach or suggest the claimed step of "transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted supply voltage level" (emphasis added).

Because the claimed invention recites novel features that are not taught or suggested by *McClennon*, the § 102 rejection is improper.

II. *McClennon* is related to incoming data instead of outgoing data as claimed

Claim 1 recites a step of "in response to an amount of data that needed to be sent by said sender, adjusting a supply voltage level by said sensor to said sending driver accordingly."

On pages 3 of the Final Office Action, the Examiner asserts that the claimed sensor is disclosed by *McClennon* in Figure **3** as a data traffic predictor **120**.

In col. 7, lines 53-55, *McClennon* teaches that a data traffic monitor **122** within data traffic predictor **120** is utilized to monitor data arriving at a modem **20** to determine a data arrival rate (*see* block **202** in Figure **5**). In contrast, the claimed adjusting step is performed "in response to an amount of data that needed to be sent by said sender." Thus, *McClennon* is related to incoming data arrived at the modem, and the claimed adjusting step is related to outgoing data leaving the sender. As such, *McClennon* does not teach or suggest the claimed adjusting step.

In addition, *McClennon*'s determination criteria is also different from the claimed invention. According to col. 7, lines 57-58, *McClennon* determines whether the arriving data is periodic or quasi-periodic. In contrast, the claimed adjusting step deals with "an amount of data that needed to be sent by said sender" and not the periodicity of data.

Because the claimed invention recites novel features that are not taught or suggested by *McClennon*, the § 102 rejection is improper.

CONCLUSION

For the reasons stated above, Appellants believe that the claimed invention clearly is patentably distinct over the cited reference, and that the rejections under 35 U.S.C. § 102 are not well-founded. Hence, Appellants respectfully urge the Board to reverse the Examiner's rejection.

Respectfully submitted,

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ATTORNEY FOR APPELLANTS

CLAIMS APPENDIX

1. A method for managing power consumptions of a sending driver and a receiving driver, wherein said sending driver sends data received from a sender to said receiving driver via a transmission line, said method comprising:

coupling a sensor to said sender and said sending driver;

in response to an amount of data that needed to be sent by said sender, adjusting a supply voltage level by said sensor to said sending driver accordingly; and

transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted supply voltage level.

2. The method of Claim 1, wherein said method further includes adjusting a transmission frequency by said sensor to said sending driver according to said amount of data needed to be sent by said sender.

3. The method of Claim 2, wherein said method further includes transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted transmission frequency.

4. The method of Claim 1, wherein said sensor includes a data level detector.

5. The method of Claim 1, wherein said sensor includes a programmable voltage regulator.

6. The method of Claim 1, wherein said sensor includes a clock frequency selector.

7. The method of Claim 1, wherein said method further includes coupling a controller to said receiving driver.

8. The method of Claim 7, wherein said method further includes adjusting a supply voltage level by said controller to said receiving driver according to the voltage level of data on said transmission line.

9. The method of Claim 7, wherein said controller includes a pulse amplitude detector.

10. The method of Claim 7, wherein said controller includes a programmable voltage regulator.

11. An apparatus for managing power consumptions of a sending driver and a receiving driver, wherein said sending driver sends data received from a sender to said receiving driver via a transmission line, said apparatus comprising:

a sensor coupled to said sender and said sending driver;

means for adjusting a supply voltage level to said sending driver according to an amount of data that needed to be sent by said sender detected by said sensor; and

means for transmitting data from said sender by said sending driver on said transmission line to said receiving driver according to said adjusted supply voltage level.

12. The apparatus of Claim 11, wherein said sensor further includes means for adjusting a transmission frequency of said sending driver according to said amount of data needed to be sent by said sender.

13. The apparatus of Claim 12, wherein said sending driver further includes means for transmitting data on said transmission line to said receiving driver according to said adjusted transmission frequency.

14. The apparatus of Claim 11, wherein said sensor includes a data level detector.

15. The apparatus of Claim 11, wherein said sensor includes a programmable voltage regulator.

16. The apparatus of Claim 11, wherein said sensor includes a clock frequency selector.

17. The apparatus of Claim 11, wherein said apparatus further includes a controller coupled to said receiving driver.

18. The apparatus of Claim 17, wherein said controller further includes means for adjusting a supply voltage level to said receiving driver according to a voltage level of data on said transmission line.

19. The apparatus of Claim 17, wherein said controller includes a pulse amplitude detector.

20. The apparatus of Claim 17, wherein said controller includes a programmable voltage regulator.

EVIDENCE APPENDIX

Other than the Office Actions and responses already of record, no additional evidence has been entered by Appellants that is relevant to the present appeal.

RELATED PROCEEDINGS APPENDIX

There is no related proceeding as described by 37 C.F.R. § 41.37(c)(1)(x) known to Appellants, Appellants' legal representative or assignee.